INTERAGENCY COORDINATION AGREEMENT ON WETLAND MITIGATION BANKING WITHIN THE STATE OF INDIANA

MODIFIED: October 21, 2002

1 PURPOSE

The Louisville District, U.S. Army Corps of Engineers (Corps), the Detroit District, U.S. Army Corps of Engineers, (Corps), the Natural Resources Conservation Service (NRCS), the U.S. Environmental Protection Agency (USEPA), the U.S. Fish and Wildlife Service (USFWS), the Indiana Department of Environmental Management (IDEM) and the Indiana Department of Natural Resources (IDNR), hereinafter referred to as the Mitigation Banking Review Team (MBRT), pursuant to their statutory authorities and in recognition of the need to regulate the waters of the State and the waters of the United States, including wetlands, hereby agree to support the establishment of appropriate wetland mitigation banks in the State of Indiana. Further, the MBRT, including the signatories of this Interagency Coordination Agreement (ICA) or an authorized representative of the signatory, agrees that wetland mitigation banks have the potential to mitigate for unavoidable wetland impacts due to the excavating, filling, flooding or draining of waters of the State and waters of the United States as regulated under the laws of the State of Indiana, Section 404 of the Clean Water Act (CWA) and the wetland conservation provisions previously known as "swampbuster" of the Food Security Act of 1985, as amended (the 1985 Act).

This ICA includes the criteria for establishing, owning, operating and maintaining wetland mitigation banks. It further sets the criteria for authorizing applicants (e.g., individuals, corporations, units of government) to withdraw credits from a wetland mitigation bank to use as compensatory mitigation for unavoidable wetland impacts that would result from an applicant's proposed activity. It is intended that this ICA serve as the basis for the establishment, certification and withdrawal of credits from wetland mitigation banks. The appropriate Corps district (Louisville or Detroit) will be the lead agency in the review and approval of wetland mitigation bank projects within their geographic jurisdiction for the purpose of Section 404 of the Clean Water Act. The NRCS will be the lead agency for the establishment of wetland mitigation banks for the purpose of complying with the wetland conservation provisions of the 1985 Act. The lead federal agency shall be the repository of official documentation concerning this agreement as well as documentation concerning wetland mitigation banks resulting from this agreement.

2 GOALS

Wetland mitigation banks are a form of regional compensation that encourages the development of large-scale wetland complexes that can be managed and maintained in perpetuity for the benefit of the general public. The objective of a wetland mitigation bank is to provide for the replacement of the various functions and values of wetlands and other aquatic resources that are lost as a result of authorized impacts. The consolidation of multiple small mitigation projects may allow for better economic planning, implementation and maintenance. Additionally, the wetland mitigation banks may produce wetlands of greater value because of their location, size, high level of commitment to wetland functions, and the assured long-term management of the ecosystem. Further, this action may reduce administrative costs and delays in issuing permits for proposed activities that qualify for use of a wetland mitigation bank. The expected benefits include water quality management, fish and wildlife habitat restoration and creation, flood control, conservation of biological diversity, education, recreation, and aesthetics.

The establishment of wetland mitigation banks and the determination of a project's eligibility for use of a wetland mitigation bank shall be in compliance with all applicable federal and state regulations and guidelines, as listed in the Authorities section of this document.

The MBRT intends that wetland mitigation banks be a means of creating, restoring, enhancing and preserving wetlands and generating wetland mitigation bank credits in advance of destroying wetlands for specific projects. As an interim measure, and as a means of encouraging the initial development of wetland mitigation banks, the sale of credits may be allowed under conditions to be described later in this document.

3 DEFINITIONS

- 1) Applicant the person, individual or entity seeking authorization from the Corps, IDEM or IDNR to impact a wetland and who seeks to purchase credits from the Bank to satisfy any compensatory mitigation requirements.
- 2) \overline{C} mean Coefficient of Conservatism. With the exception of exotic species, each species inventoried has a Coefficient of Conservatism (C). The \overline{C} is calculated by adding all the coefficients together and dividing by the total number of species, including exotics (N): $\overline{C} = \sum C/N$.
- 3) Coefficient of Conservatism A value between 0 and 10 which denotes a species' sensitivity to disturbance and specificity to a particular habitat. High values indicate plants that are found most often in natural, low disturbance remnants, while low values indicate plants that thrive in degraded habitats. For the purposes of this ICA the MBRT will use the methods and coefficients published by Taft et. al 1997¹.
- 4) Consensus -- The term consensus, as defined herein, is a process by which a group synthesizes its concerns and ideas to form a common collaborative agreement acceptable to all members. While the primary goal of consensus is to reach agreement on an issue by all parties, unanimity may not always be possible.
- 5) Compensatory mitigation--The restoration, creation, enhancement or preservation of wetlands or other aquatic habitats expressly for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.
- 6) Credit transfer agreement -- The written agreement between the applicant and the wetland mitigation bank in which the wetland mitigation bank agrees to sell or otherwise transfer mitigation credits to an applicant and the applicant agrees to buy or otherwise accept the mitigation credits. The credit transfer agreement (or other MBRT approved credit transfer Instrument) must specify the exact number of credits transferred specified in 100ths of a credit. Both parties must sign the agreement and submit the signed agreement to the MBRT and the permitting agency requiring the mitigation within 30 days of credit transfer (Attachment B).
- 7) Creation--The establishment of a functional wetland where one did not formerly exist.
- 8) Credit, Conditionally Certified --Unit of measure representing the portion of the wetland mitigation bank that has been constructed and is exhibiting functional qualities of a wetland after two years, but requires additional monitoring and management.
- 9) Credit, Fully Certified -- Units of measure representing the portion of the wetland mitigation bank that has been constructed and monitored for a period of time not less than five years and is considered to be functioning as wetlands without further intervention.
- Credit, Precertified --Unit of measure representing the credits allowed for sale by the MBRT prior to construction.
- 11) Credit Release Letter -- Letter issued by the MBRT allowing a number of credits specified by the credit release schedule to be released for sale or transfer to applicants. No credit release letter shall be issued unless the lead federal agency and IDEM agree that the wetland mitigation bank has satisfied the requirements for credit release.
- 12) Credits Generated The total number of credits the sponsor can sell including precertified credits, conditionally certified credits, and fully certified credits. In general this figure is equal to the total acreage of

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¹ Taft, John B., Gerould S. Wilhelm, Douglas M. Ladd, and Linda A. Masters. 1997. Floristic Quality Assessment for Vegetation in Illinois, A Method for Assessing Vegetation Integrity. Erigenia, Number 15. November 1997. pp.3-95

- wetland created or restored plus a portion of the wetland acreage enhanced or preserved. No direct credit will be given for upland preservation.
- 13) Credits Released -- The number of credits released by the MBRT for sale or transfer to applicants. Credits shall be released by the MBRT in accordance with the wetland mitigation bank Instrument's credit release schedule. The sponsor shall submit an application for credit release that demonstrates that the requirements for credit release have been met. If the MBRT finds the requirements have been met, the lead federal agency shall issue a credit release letter releasing the number of credits in accordance with the credit release schedule.
- 14) **Credits Transferred** -- The number of credits that have been sold or otherwise transferred to applicants. Credits may not be transferred unless they have been released through a credit release letter.
- 15) Debits -- The number of credits required by the permitting agency(s) to compensate for unavoidable wetland loss.
- 16) Department of the Army (DA) Permits--Authorizations for the excavation and discharge of dredged and/or fill material into the "waters of the United States", including wetlands, issued by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899.
- 17) Enhancement--The improvement of functions and values of an existing wetland without altering its habitat type. Enhancement is assumed to provide less than 100% functional improvement compared to restoration or creation. The number of credits generated by enhancement may be less per acre than the number of credits generated by restoration or creation.
- 18) **Growing Season**—For the purposes of this agreement the growing season shall be the period indicated in the Soil Survey (NRCS) of the county the wetland mitigation bank is located in.
- 19) Hydroregime The depth, frequency and duration of saturation, inundation and flooding in a wetland.
- 20) I The mean coefficient of conservatism (\overline{C}) multiplied by the square root of the total number of species inventoried (N): $I = \overline{C}(\sqrt{N})$.
- 21) Jurisdictional waters Waters of the State, waters of the United States, including wetlands, or both.
- 22) Land Manager -- The individual or entity who accepts responsibility for the management of the property after the wetland mitigation bank is successful and the MBRT has released the sponsor from monitoring.
- 23) Ledger--Document to be used in the accounting of credits and debits The ledger will be maintained by the sponsor and periodically reviewed by the MBRT.
- 24) Long-Term Management Plan -- A plan for the future uses and management of the site. This plan must be approved by the MBRT before the final credit release. The land shall be managed in accordance with the long-term management plan. Long-term uses shall be consistent with the uses allowed in the conservation easement. These management activities shall be funded using the long-term management trust fund.
- 25) Long-Term Management Trust -- A trust fund established for the maintenance of the site into perpetuity. The sponsor is responsible for placing enough money into trust to generate, from interest, the annual management budget.
- 26) Management--Actions taken within the wetland mitigation bank wetlands, as stipulated by the MBRT or in the wetland mitigation bank Instrument, to establish and maintain desired habitat conditions. Representative management actions include water level manipulations, herbiciding, mechanical plant removal, and prescribed burning.
- 27) MBRT The Mitigation Banking Review Team. The MBRT consists of either the Detroit District or the Louisville District, United States Army Corps of Engineers (Corps) and the Natural Resources Conservation Service (NRCS), the Indiana Department of Environmental Management (IDEM), the Indiana Department of Natural Resources (IDNR), the United States Environmental Protection Agency (USEPA), and the United States Fish and Wildlife Service (USFWS).
- 28) Mitigation Bank--The geographically and ecologically defined area for the creation, restoration, and enhancement of wetlands from which the applicant can purchase credits to provide required compensatory mitigation to offset unavoidable wetland impacts of their proposed project.
- 29) Mitigation Bank Instrument—A written document, which contains specifications pertaining to establishment, operation and maintenance of a wetland mitigation bank. It shall include codification of the goals, objectives, performance standards, and operating procedures of the wetland mitigation bank, and incorporate the relevant terms and conditions of this ICA. Principal types of wetland mitigation bank Instruments are a legally binding agreement between the sponsor and the MBRT or a DA Permit issued to the sponsor.

- 30) Monitoring--A specific program of data collection, by the sponsor, that documents the physical, chemical and biological characteristics of the wetland mitigation bank for the purpose of determining compliance with the performance standards set forth in the wetland mitigation bank Instrument.
- 31) N Species richness or the total number of species encountered, including both native and adventive species (exotics).
- 32) Natural Area -- For the purpose of this ICA, a natural area shall mean any area in which the prevalent vegetation is native to Indiana and is either unmaintained or maintained for conservation. Mowed areas, impervious areas, graveled or riprap areas, and areas planted or dominated by non-native vegetation are not considered natural areas.
- 33) Permitting agencies refers to each agency that has jurisdiction over a specific application to use the Bank as compensatory mitigation for impacts to a wetland. Permitting agencies may include the Corps, NRCS, IDEM or IDNR.
- 34) Prospectus--A preliminary plan for a wetland mitigation bank, prepared by a prospective sponsor, and submitted to the lead federal agency for consideration. The plan shall be reviewed and approved by all MBRT members
- 35) Restoration Re-establishment of wetland characteristics and functions at a site where they have ceased to exist.
- 36) Service Area The area in which a wetland mitigation bank can reasonably be expected to provide appropriate compensation for impacts to wetlands and/or other aquatic resources. In Indiana this shall mean the area defined as the 8-digit hydrologic unit code as established by the U.S. Geological Survey for the State of Indiana (Attachment A) in which the wetland mitigation bank falls. The only exception to this shall be for the watershed delineated with the hydrologic unit code 05120201; this watershed is divided along a line that runs between the borders of the sub-watersheds 080, 050, and 110 (which lie within the northern portion of the 8-digit watershed code) and the sub-watersheds 020, 090, and 130 (which lie within the southern portion of the 8-digit watershed).
- 37) Site Development Plan--A plan for each wetland mitigation bank site that identifies all actions that will be undertaken to generate credits. Representative elements of the site development plan must include plans for site grading, revegetation, erosion control, water control structures, management and monitoring. This plan must be reviewed and approved by the MBRT.
- 38) **Sponsor** Any public or private entity responsible for establishing and, in most circumstances, operating a wetland mitigation bank.
- 39) State permit A construction in a floodway permit issued by IDNR, a National Pollutant Discharge Elimination System permit issued by IDEM, or any other state authorization regulating impacts to waters of the State other than a Water Quality Certification.
- 40) Success Time at which the MBRT considers the site to meet or exceed all performance standards specified in the wetland mitigation bank's Instrument and this ICA.
- 41) Upland Buffer -- A contiguous strip of native upland vegetation with slopes no greater than 5%.
- 42) **Upland Inclusions** Existing, high quality, upland areas preserved, restored and managed as a part of the wetland mitigation bank.
- 43) Waters of the State Those areas subject to state regulatory authority as defined in IC 13-11-2-265.
- 44) Waters of the United States--Those areas subject to Corps regulatory authority pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.
- 45) Water Quality Certification--Certification issued by the Indiana Department of Environmental Management (IDEM) in accordance with Section 401 of the Clean Water Act and state water quality standards.
- 46) Wetlands--Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs or other similar areas.

4 **AUTHORITIES**

This agreement does not, in any manner, affect the statutory and regulatory authorities and responsibilities of the signatory parties. The establishment and use of wetland mitigation banks, as described in this document, shall be in accordance with all applicable statutes, regulations, and policies, including the following:

- Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 CFR part 228)
- Clean Water Act (33 U.S.C. 1251 et seq.);
- Rivers and Harbors Act of 1899 (33 U.S.C. 403);
- Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.);
- Endangered Species Act (16 U.S.C. 1531 et seq.);
- National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.)
- Interim Final Rule Highly Erodible Land and Wetland Conservation (7 CFR Part 12)
- Final Rule for Regulatory Programs of the Corps of Engineers (33 CFR Parts 320-330);
- Guidelines for Specifications of Disposal sites for Dredged and Fill Material (40 CFR Part 230) (Section 404 (b) (1) Guidelines);
- Memorandum of Agreement Between the U.S. Environmental Protection Agency and the Department of the Army Concerning Determination of Mitigation under the Clean Water Act, Section 404(b)(1) Guidelines, 1990:
- Water Pollution Control Laws (IC 13-18)
- Permits (IC 13-15)
- Indiana Flood Control Act (IC 14-28-1)
- Indiana Navigable Waterways Act (IC 14-29-1)
- Department of Environmental Management (IC 13-13)
- Powers and Duties of Department of Environmental Management and Boards (IC 13-14)
- Lakes Preservation Act (IC 14-26-2)
- Lowering of Ten Acre Lakes Act "Ditch Act" (IC 14-26-5)
- Nongame and Endangered Species Conservation (IC 14-22-34)
- Indiana Water Quality Standards (327 IAC 2)
- NPDES regulations (327 IAC 5)

5 CONSIDERATIONS IN ESTABLISHMENT AND USE OF MITIGATION BANKS

The establishment of wetland mitigation banks within the State of Indiana shall be subject to consensus approval by the MBRT. As wetlands are created or restored, credits are established and these areas become "jurisdictional waters." Applicants proposing to impact wetlands that currently demonstrate high quality functional characteristics will rarely be allowed to use a wetland mitigation bank to provide compensatory mitigation for the impact if the wetlands: have important hydrologic functions which, if altered, would have a significant adverse effect on the source, quality, or seasonal distribution of surface and/or groundwater supply of important habitats; provide important habitat for federal or state listed endangered or threatened species; provide important breeding, foraging, or resting areas for migratory birds or other wetland-dependent wildlife; have high quality natural communities indicating undisturbed natural conditions; or are a rare and unique resource in the state (e.g., fens, bogs, cypress swamps, dune/swales). A more detailed description of these high quality wetland communities may be obtained from the IDNR, Division of Nature Preserves.

If a DA Permit is needed in order to construct or restore wetlands on the wetland mitigation bank site, the Corps will follow normal procedures, which may include a full public interest review. If a permit is not needed to

establish wetland mitigation bank credits, the lead federal agency will issue a Public Notice for a full public interest review.

5.1 GENERAL GUIDELINES FOR USAGE OF A BANK BY AN APPLICANT

Using permit review procedures set forth in Section 404 of the Clean Water Act and in 33 CFR parts 320 to 330, the lead federal agency will conduct project evaluations and will determine the level of mitigation required and whether the applicant is eligible to use a wetland mitigation bank. Additionally, IDEM and IDNR shall follow their normal review procedures and determine the level of mitigation required and whether the project is eligible to use a wetland mitigation bank for purposes of issuing Section 401 Water Quality Certification or other applicable state permits. It is the MBRT's goal to replace functions performed at the impact site; functions may include: fish and wildlife habitat, floodwater storage, water quality improvement, floral diversity, erosion control, aesthetic and recreational activities, etc. The following general guidelines will be used by the agencies in determining whether it is appropriate for an applicant to buy credits from a wetland mitigation bank in lieu of providing on-site compensatory mitigation:

- It is intended that wetland mitigation banks be used primarily to mitigate wetland impacts associated with projects that, individually, affect relatively small acreage of moderate to low value wetlands. In most cases, these will be projects which, with mitigation, currently qualify for Corps General Permits.
- 2) In compliance with Section 404(b)(1) guidelines of the Clean Water Act, avoidance and minimization of impacts to wetlands must be reflected in the application for a permit or Water Quality Certification when an applicant proposes purchasing credits from a wetland mitigation bank.
- 3) On-site compensatory mitigation will be required over the use of purchasing wetland mitigation bank credits for projects where it is determined that replacing wetlands on-site is appropriate considering the landscape functions and probability of mitigation success; conversely, wetland mitigation banking may be appropriate where on-site mitigation would only produce low functional wetlands or the mitigation would be prone to failure.
- 4) It is the goal of the signatory agencies that project impacts be mitigated at wetland mitigation bank sites located within the same watershed or specified service area near the project site. For the purposes of this ICA, the service areas are defined using the attached 8-digit watershed code for the State of Indiana as delineated by the U.S. Geological Survey (Attachment A). In the event that project impacts are allowed to be mitigated outside the watershed/service area, higher credit ratios may be required.

5.2 WETLAND MITIGATION BANK ESTABLISHMENT SITE SELECTION CRITERIA

The following criteria shall be considered in evaluating and approving wetland mitigation bank sites and their development plans. Failure to meet any of these criteria may be, depending on circumstances, grounds for rejection of the wetland mitigation bank site. The site shall:

- 1) Be owned or under the full control of the sponsor;
- 2) Not contain prior recorded easements that the MBRT determines would adversely affect the maintenance of the wetland mitigation bank as a wetland in perpetuity.
- Contain a majority of drained or hydrologically modified hydric soils, recognizing that restoration of former wetlands is a preferred form of mitigation;
- Not include conversion of moderate or high quality uplands for the creation of wetlands;
- Have no high quality wetlands or uplands that would be adversely affected by the construction or restoration work;
- 6) Following construction, be surrounded by at least a 50'-wide, upland buffer on all borders except where the mitigation site meets a water body, another wetland, or a natural area. Upland buffers must be vegetated with species native to that region of Indiana. Natural upland inclusions are also encouraged;
- 7) Be situated in a manner that adequate self-sustaining hydrology can be ensured;

- 8) Contain no known hazardous waste or solid waste, a survey of which, included as part of a Phase I assessment, must be conducted by qualified personnel (ASTM-1528).
- 9) Have adjacent land uses and zoning designations compatible with the goals of the wetland mitigation bank;
- 10) Following construction, support wetland-dependent species assemblages similar to those in natural areas in abundance, complexity and diversity including macroinvertebrates, reptiles, amphibians, mammals and bird species.
- 11) Following construction, support wetland plant communities similar to those in natural areas in cover, complexity and diversity.
- 12) Following construction, have all man-made grades steeper than 5% located outside of the buffer area, with the exception of impoundment structures. Other exceptions may apply if the sponsor can show that steeper slopes are indicative of the natural areas the wetland mitigation bank is designed to emulate (e.g., dune/swale, seep slope).
- 13) Include at least 25 acres of wetland restoration, creation, enhancement or a combination of the three.
- 14) In addition, the development of a wetland mitigation bank site shall not adversely affect Federally or State listed threatened or endangered species or their critical habitat areas.

Each wetland mitigation bank site shall be selected and managed to utilize the natural water storage functions of wetlands. Flood control and/or stormwater detention shall not be the purpose for constructing a wetland mitigation bank. The extent to which flood control/stormwater detention is provided by a wetland mitigation bank site should be determined on a case-by-case basis by the MBRT. The MBRT may allow routing of stormwater into the wetland mitigation bank if the water will not have a negative effect. The MBRT may require treatment of stormwater inputs.

For the purpose of this ICA, emphasis will be placed on the replacement of wetland acreage, type (in-kind replacement), and functions. Therefore, the preferred method of generating credits will be the restoration of former wetlands. Creation of new wetlands, which will result in a net gain of wetland acreage on the wetland mitigation bank site, may be considered. Wetland enhancement and preservation as a means of generating wetland mitigation bank credits will be considered on a case-by-case basis. The appropriate functions and values assessment methodologies and credit ratios will be determined for each site through consultation with the MBRT. The preservation of existing wetlands can be considered for mitigation credit in exceptional situations, such as cypress swamps, bogs, fens, and dune/swales. Also, the MBRT may give partial credit for preservation when preservation is not the sole source of credit generation and the sponsor has demonstrated that the preservation will augment the functions of the wetland mitigation bank as a whole.

5.3 BANK OWNERSHIP AND CONSERVATION EASEMENT

A wetland mitigation bank may be publicly or privately owned. The wetland mitigation bank may be incorporated as for-profit or not-for-profit. If the wetland mitigation bank is incorporated, it must be incorporated in the State of Indiana. Publicly owned refers to ownership by any municipal, county, regional, State or Federal governmental entity.

All land, including associated upland, which is part of the wetland mitigation bank shall be protected in perpetuity from future development by a permanent conservation easement. The conservation easement must set forth the long-term uses planned for the site. Following the review and approval of the conservation easement by the MBRT, the sponsor must record the easement with the appropriate county recorders office, attach it to the abstract of title, and provide a certified copy of the recording to IDEM and the lead federal agency prior to the MBRT authorizing any credit release. The easement will remain on file with the lead federal agency.

Transfer or sale of the wetland mitigation bank or conservation easement may occur to any party willing and financially capable of abiding by the terms and conditions of the wetland mitigation bank Instrument and this ICA. Any such transfer must first receive written approval from the MBRT.

5.4 INITIAL PLANNING AND PROSPECTUS DEVELOPMENT

The individual or entity proposing to sponsor the establishment of a wetland mitigation bank may choose to hold informal discussions with the MBRT. These discussions would serve to acquaint the sponsor with the legal, regulatory, and ecological background relevant to wetland mitigation banking and to provide procedural guidance. The prospective sponsor will be informed that a formal request, in the form of a prospectus, for the establishment of a wetland mitigation bank must be made to the lead federal agency. The prospectus must also include the DA permit application and state permit applications, if required. The purpose of the prospectus is to provide sufficient information to determine whether the general considerations and site evaluation criteria of the ICA are met. The prospectus will become the basis for the wetland mitigation bank instrument and must contain the following:

- 1) Bank location and size;
- 2) Title Search and legal description of the property;
- 3) A copy of all easements recorded on the wetland mitigation bank site;
- 4) A delineation of any waters of the State and waters of the United States including any wetlands that may exist within the proposed wetland mitigation bank site;
- 5) Type of wetland mitigation bank (i.e., whether single client, general use, market oriented, etc.);
- 6) Method of credit generation; (i.e., restoration, creation, enhancement or preservation);
- 7) Proposed credit release schedule;
- 8) Proposed performance standards;
- 9) Rationale for the types of wetlands chosen for development;
- 10) A statement concerning the wetland restoration viability at the proposed location; this must include a description of the surrounding land use and a review of local zoning, development, and transportation plans;
- 11) A general site plan showing the location of all existing and proposed wetlands (by wetland type), open water areas, waterways, inlets, outlets, upland habitats, roads, trails, structures, utilities, and any other existing and proposed site improvements (including future uses of the site);
- 12) A preliminary construction plan and schedule of completion. This shall include preliminary administrative, management, monitoring and financial plans. The sponsor's financial plan must demonstrate that the long-term management trust will guarantee the wetland mitigation bank's maintenance in perpetuity whether through continual ownership or by conveyance to a public or private agency that will assume the responsibility of the wetland mitigation bank;
- 13) A list of all adjacent property owners including complete name and address;
- 14) The name of the entity that will agree to issue the performance bond and/or irrevocable letter of credit; and
- 15) Articles of incorporation for the wetland mitigation bank, if appropriate.

5.4.1 APPLICATION

If a DA permit is required for the initial wetland mitigation bank development, the sponsor must submit a DA permit application and a prospectus to the appropriate Corps district and must apply for any necessary state permit or Water Quality Certification. If no permit is required, only a prospectus must be submitted to the appropriate Corps district. Upon receipt of an application and/or prospectus, the Corps will begin the public interest review including the issuance of a public notice soliciting comments on the application and/or prospectus from Federal, State and local agencies, the adjacent property owners and the general public.

The MBRT shall conduct site inspections of the proposed wetland mitigation bank. A letter of response to the prospectus indicating the wetland mitigation bank's feasibility will then be prepared by the lead federal agency with the MBRT's consensus, based upon observations made during the site visits, consultations and upon review of comments received from the public.

The formal request to the Corps for establishment of a wetland mitigation bank shall include:

- 1) A DA permit application to conduct any work within existing waters of the United States that is necessary to establish the wetland mitigation bank. If no DA permit is needed, no application need be submitted;
- 2) Application for Water Quality Certification or State Permit if one is required; and
- 3) A copy of the previously described prospectus.

6 DETAILED PLANNING STAGE

This is the final planning stage leading to the issuance of a permit or signatory approval from the MBRT. Each wetland mitigation bank must submit, to the MBRT for approval, a site development plan that identifies and incorporates to the maximum extent practicable:

- Diverse aquatic and supporting landscapes (these may include, shallow open water, riparian wetlands, deep and shallow marshes, floodplain forest, wet meadows and prairies, and upland inclusions and buffers) which are interrelated so as to maximize wetland functions and values;
- 2) Diverse wildlife habitats:
- 3) Associated upland buffer areas contiguous to the wetlands to protect the wetlands from potential adverse effects of adjacent land use, specifying the width and area (acres) of all buffer zones;
- 4) Wetland functions which will be created or enhanced;
- 5) Plant species native to the area;
- 6) The type and source of soils;
- 7) The means for establishing the appropriate hydrology, including adequate storage for flood control, flow distribution, and water quality management;
- 8) Design, maintenance, and monitoring procedures that minimize energy needs, human intervention, cost, weed and pest control, including burnings. Monitoring procedures generally include vegetation transects, shallow groundwater monitoring arrays, delineations, mapping, etc.
- 9) A table of the wetland mitigation bank proposed acreage by wetland type, open water, upland habitat, roads, structures, etc.
- 10) Cross sections of the property showing at a minimum existing surface elevations, future surface elevations, existing seasonal high water table, future seasonal high water table, outlet control elevation, emergency outfall elevations, inlet elevations, berms, dams or other structures etc.
- 11) A map which shows areas by vegetation communities and planned hydroregime.

7 BANK OPERATION

7.1 GENERATING AND CERTIFYING CREDITS

Banking credit can be generated as follows:

- 1) Restoration: one acre of wetland restoration generates one wetland mitigation bank credit.
- Creation: one acre of wetland creation generates one wetland mitigation bank credit.
- 3) Enhancement/Preservation: Partial credit (specified in a mitigation bank instrument) can be generated for permanent enhancement such as improving the hydrology of an existing degraded wetland site. Credit may be given when existing wetland and or other aquatic resources are preserved in conjunction with restoration, creation or enhancement activities and it is demonstrated that the preservation will augment the functions of the restored, created or enhanced aquatic resource. Such augmentation may be reflected in the total number of credits available from the wetland mitigation bank. Credits generated through wetland enhancement or preservation will be determined by the MBRT on a case-by-case basis.
- 4) The inclusion of upland and deepwater habitat within a wetland mitigation bank may be inadvertent (e.g., due to topographic position and real estate considerations) or planned to enhance certain wetland functions. No

direct mitigation credit would be accorded for such areas unless beneficial effects can be clearly demonstrated. Note that the inclusion of upland areas may substantially increase diversity and may therefore significantly increase "I" values in the Floristic Quality Assessment.

7.1.1 MITIGATION BANK CREDITS- PERFORMANCE STANDARDS

Wetland mitigation bank credits shall be generated as wetlands are created, restored, enhanced or preserved on the wetland mitigation bank site. Credits shall be fully certified by the MBRT when the site conforms to the following performance standards:

- 1) Wetlands created or restored for credit shall meet the criteria outlined in the Corps of Engineers' Wetland Delineation Manual (Technical Report Y-87-1).
- 2) At least 80 percent of the planted/seeded species are alive and present following the fifth full growing season. The planting and seeding must conform to the approved construction plans.
- The wetland plant communities must be free of the invasive non-native species purple loosestrife (Lythrum salicaria) and common reed (Phragmites australis).
- 4) All attempts should be made to eliminate all non-native invasive species, including reed canary grass (*Phalaris arundinacea*) and Eurasian water-milfoil (*Myriophyllum spicatum*), from all areas of the wetland mitigation bank including the preservation areas, upland buffers, and upland inclusions. The site shall be surveyed annually for non-native species presence. Presence of the above species may result in an extension of the monitoring period to monitor the effectiveness of the control measures and gauge the rate of infestation. The MBRT may allow the final release of credits if either the infestation is eliminated or sufficient funding is provided in the long-term management trust to control the non-native/nuisance species.
- 5) The total of native perennial species within each wetland plant community constitutes at least 50 percent cover within two (2) years after planting or seeding and 80 percent cover within five (5) years. Alternative standards for specific wetland habitats (e.g., the diversity of wetland species) may be developed on a case-by-case basis.
- 6) Additional performance standards will be specified in the wetland mitigation bank's Instrument based on the goals of that particular wetland mitigation bank.

If at the end of five (5) years of monitoring, any of the above standards are not met, the sponsor or the authorized agent of the wetland mitigation bank shall submit a plan to the lead federal agency which outlines all corrective measures to be taken based on the ecological conditions of the site. Management activities shall continue until all standards are met and verified by the MBRT. Any corrective measures proposed must be approved by the MBRT before the work is initiated by the sponsor.

7.2 MITIGATION BANK CREDIT RELEASE

Credits shall be released only through a letter of credit release. The letter of credit release shall be issued only after the MBRT has reviewed the wetland mitigation bank's application for credit release and concluded that the wetland mitigation bank has met the requirements for credit release as specified by the wetland mitigation bank's Instrument and this ICA. Credit release will commence as per a credit release schedule incorporated in the mitigation bank instrument. This schedule will be drafted on a case-by-case basis for the purpose of minimizing the risk associated with precertified credit sales. These schedules shall be flexible so as to encourage innovation while reducing risk of a net loss of wetland acreage or function but will be governed by the following guidelines:

- 1) Up to 30% of the wetland mitigation bank's available credits may be released after the following criteria have been met:
 - a) The escrow account, performance bond or irrevocable letter of credit has been secured by the sponsor and approved by the MBRT as described under the Financial Assurances section.
 - b) The conservation easement has been approved by the MBRT and recorded with the appropriate county recorder's office and a copy sent to the lead federal agency and IDEM.
 - c) The wetland mitigation bank Instrument has been signed by each member of the MBRT.

2) At least 50% of the credits generated may not be sold until the performance standards have been met unless provisions have been made for incremental release of credits based on the achievement of interim performance standards set forth in the Instrument.

7.3 MITIGATION BANK CREDIT SALES

7.3.1 FLORISTIC QUALITY THRESHOLD

The purpose of the Floristic Quality Threshold is to create an incentive for better quality mitigation by rewarding efforts based on performance, while allowing the sponsor flexibility. This is accomplished by comparing the floristic quality of the wetland mitigation bank to the floristic quality of the individual impact sites wanting to use the wetland mitigation bank. The Floristic Quality threshold is not meant to take the place of other tools used by the permitting agencies to determine if the wetland mitigation bank compensates for the functions lost through the permitted loss.

- 1) Precertified credits may be used as compensation for impacts to degraded wetlands ($\overline{c} < 2$, I < 12).
- 2) Conditionally certified and fully certified credits may be used as compensation for impacts which are the same floristic quality or lower floristic quality than the wetland mitigation bank itself. An impact site is qualified to use the wetland mitigation bank if the impact site's " \overline{c} " and "I" values are less than the wetland mitigation bank's threshold values described below.
 - a) The Bank's floristic quality shall be determined by using the Floristic Quality Assessment Method² over the course of the monitoring period (Exhibit G). All portions of the Bank, including uplands, shall be used in calculating the threshold.
 - b) The threshold shall be calculated by averaging the "C" and "I" for the last two years of monitoring (i.e. if monitored for five years then the threshold shall be the average of year four and year five, if monitored for seven years then the threshold shall be the average of year six and year seven). All portions of the wetland mitigation bank, including any upland buffers or inclusions, shall be used in calculating this threshold.
 - c) The sponsors may choose to monitor for Floristic Quality outside the monitoring period in hopes of increasing their Floristic Quality Threshold.
 - d) The impact site's floristic quality shall be determined using an informal inventory method in which a competent botanist transects each macrophyte community planned for impact and records every plant species he or she encounters. The botanist is to continue until each additional unit of effort results in less than a ten percent increase in total species richness. The " \overline{C} " and " Γ " values for the impact wetland shall be calculated from this list.
 - e) The permitting agencies may, at their discretion, allow an applicant to use a wetland mitigation bank if the impact site's \overline{c} is no more than 0.5 point greater than that of the wetland mitigation bank, and the impact site's "I" value is no more than 5.0 points greater than that of the wetland mitigation bank.

7.3.2 SALE OF CREDITS

Upon authorization of the wetland mitigation bank through the issuance of a DA permit and/or interagency agreement, the sale of wetland credits and the creation or restoration of wetlands and buffers may commence. The Wetland mitigation bank credits may be sold for compensatory mitigation purposes in accordance with the following conditions:

² Taft, John B., Gerould S. Wilhelm, Douglas M. Ladd, and Linda A. Masters. 1997. Floristic Quality Assessment for Vegetation in Illinois, A Method for Assessing Vegetation Integrity. Erigenia, Number 15. November 1997. pp.3-95.

- 1) The sponsor may sell credits as they are released by the MBRT. Credits may only be sold to applicants who have received authorization to use the wetland mitigation bank via the appropriate permits and/or certification. Both the sponsor and the applicant shall submit a signed credit transfer agreement (Attachment B) and all applicable regulatory Instruments requiring the mitigation and authorizing the use of the wetland mitigation bank (i.e., a signed 404 permit, 401 certification, NPDES permit, construction in the floodway permit) to the lead federal agency and the agency requiring the mitigation to document that the debiting action has been completed.
- Certified credits may be sold at market value.
- 3) The sponsor shall keep a ledger and provide the lead federal agency records that can be audited to ensure that credits transferred are used only once. All records must be available for any member of the MBRT to review.
- 4) Within two years of the first precertified credit sale, the sponsor must construct enough of the wetland mitigation bank to compensate for the total number of precertified credits allowed by the wetland mitigation bank's Instrument. The sponsor must complete physical construction of the entire wetland mitigation bank, including seeding and/or planting, within five years of the first credit sale. A more in-depth schedule shall be required in each Instrument. The MBRT may grant construction delays for legitimate reasons such as unfavorable weather conditions. Slow credit sales shall not be considered adequate reason for construction delays.

7.3.3 PURCHASE OF CREDITS

In accordance with the rules governing the sale of credits as previously described, credits may be acquired by applicants as compensatory mitigation to offset unavoidable wetland losses on the following basis:

- 1) In cases where wetland mitigation banking credits are based on created or restored wetlands and are being acquired within the same watershed/service area as the wetland mitigation bank site, the following criteria will serve as guidelines However, actual mitigation ratios will be determined on a case-by-case basis:
 - a) If the wetland credits are fully certified by the MBRT, a minimum of one (1) credit shall be acquired for every acre of wetland compensatory mitigation required. Mitigation requirements may be split between credit purchases at the wetland mitigation bank and other mitigation alternatives as determined by the permitting agencies.
 - b) If the wetland credits are either precertified or conditionally certified, or are sought from outside the watershed/service area of the wetland mitigation bank, more credits will likely be required.
- 2) If credits are based on enhancement or preservation, the MBRT shall establish the number of credits generated by the wetland mitigation bank.
- 3) The appropriate permitting agency (i.e., Corps, IDEM, IDNR, etc.) may allow an applicant to mitigate at a lower mitigation ratio than normally required of conventional mitigation if the wetland mitigation bank has been constructed and has met all performance standards before the impacts occur. In no case shall this ratio be less than 1:1 (wetland mitigation bank credit: impact acres).

The sponsor shall keep a ledger of all credits generated, their certification status (i.e., precertified, conditionally certified, fully certified), permittee name, the applicable permit/certification numbers, the amount of the debit, and the type of credit if applicable (e.g., depression, forest, etc.). This ledger shall be made available to the MBRT through the lead federal agency anytime upon request. The sponsor shall notify the lead federal agency after each transaction. This notification shall include an updated copy of the bank ledger. The sponsor shall provide an annual summary to all members of the MBRT.

7.3.4 MITIGATION BANK SERVICE AREA

Credits from a wetland mitigation bank may be sold to mitigate for wetland impacts within the wetland mitigation bank's service area. The service area is the area in which the wetland mitigation bank can reasonably be expected

to replace the uses of the wetland to be impacted and provide appropriate compensation for impacts to wetlands and/or other aquatic resources. The service area shall be the 8-digit watershed (as delineated by the U.S. Geological Survey) in which the wetland mitigation bank is located. The only exception to this shall be for the watershed delineated with the hydrologic unit code 05120201; this watershed is divided along a line that runs between the borders of sub-watersheds 080, 050, and 110 (which lie within the northern portion of the 8-digit watershed code) and the sub-watersheds 020, 090, and 130 (which lie within the southern portion of the 8-digit watershed). The appropriate permitting agency (e.g. IDEM, IDNR, Corps, etc.) may approve utilization of the wetland mitigation bank for impacts outside the service area to comply with that agency's compensatory mitigation requirements if greater ecological or water quality benefits can be derived from doing so.

8 FINANCIAL ASSURANCES AND MANAGEMENT

8.1 FINANCIAL ASSURANCES

The sponsor must provide both short-term and long-term financial assurances. In the short-term, the sponsor must guarantee completion of the wetland mitigation bank and payment of any liens or taxes on the property. For the long-term, the sponsor must establish a trust fund which will generate enough money to fund annual maintenance costs.

- Short-term: The sponsor shall have deposited in an escrow account adequate funds to ensure the construction, monitoring, management and maintenance of the wetland mitigation bank. The escrow account must be maintained until all credits have been fully certified and the MBRT determines that the wetland mitigation bank is self-sustaining. As an alternative to the escrow funds, the wetland mitigation bank owner can provide a performance bond issued by a corporate surety and or an irrevocable letter of credit issued by a financial institution for work to be performed. The corporate surety and/or the financial institution shall be approved by the MBRT prior to the issuance of a performance bond and/or irrevocable letter of credit. The dollar amount will be determined on a case-by-case basis depending upon the size and type of wetland mitigation bank proposed. The dollar amount of the bond and/or letter of credit will be reviewed and adjusted annually based on the results of the monitoring reports. Either IDEM or another agency approved by the MBRT must be listed as the beneficiary of the above Instruments. All types of financial assurances must include funds to cover any and all liens on the property in addition to other construction costs.
- 2) Long-term: The sponsor shall create and fund a long-term management trust fund that will generate annual returns sufficient for annual administration and maintenance of the site into perpetuity. As a part of the prospectus, the sponsor will submit an estimated yearly maintenance cost for perpetual maintenance. The MBRT will review and may modify this figure if necessary. After construction has been completed and until the wetland mitigation bank is released from monitoring, the sponsor shall submit an annual summary of management related expenses. The MBRT will review these figures and use them to adjust the amount of principal required in the trust fund. Before the final credit release, the sponsor shall submit a copy of the trust document and demonstrate that sufficient principal has been invested to generate enough net interest (accounting for tax, inflation, fees, etc.) to fund the annual maintenance and administration costs. The MBRT may require a percentage of each credit sale be reserved for this purpose or require a portion of the trust to be funded before each credit release. Any MBRT member may require an independent audit of the trust at any time to insure proper management of the property and the trust fund. This audit shall be conducted by a certified public accountant. Misuse of the trust fund may result in forfeiture of the trust, or criminal prosecution.

8.2 MONITORING, MANAGEMENT, AND REPORTING

Monitoring shall occur for a minimum of five (5) years from the date site construction and planting has been completed and shall continue until all performance standards have been met. The MBRT may require monitoring for a longer period where more time is needed to ensure a stable condition or when corrective action is taken.

Management shall include all actions, as needed, to reconcile the wetland mitigation bank's current conditions with the performance standards established. The sponsor shall be responsible for monitoring, management and reporting to the lead federal agency. However, the work can be accomplished through subcontracting with public or private organizations.

The monitoring results and financial status of the wetland mitigation bank shall be provided to the lead federal agency on a yearly basis during the monitoring period. The lead federal agency will distribute this information to the MBRT members within 30 days of receipt. Mitigation monitoring reports may cease following the MBRT's determination that the performance standards have been met and has fully certified the remaining credits, but the notification of credit sale and annual summary of credit transactions as required above under "PURCHASE OF CREDITS" must continue until all credits have been sold. The sponsor may choose to continue monitoring and reporting past wetland mitigation bank success and full certification of credits in hopes of increasing the wetland mitigation bank's Floristic Quality Threshold for any unsold credits. Any member of the MBRT shall retain the right to inspect the wetland mitigation bank site at any time. The lead federal agency shall provide the sponsor or applicant, upon request, copies of any reports. Joint field inspections by members of the MBRT shall be conducted on a regular basis. The MBRT will establish an annual monitoring schedule that assures that all wetland mitigation bank sites are inspected for compliance with their respective Instruments.

8.2.1 LONG-TERM MANAGEMENT

The wetland mitigation bank, once established, must be dedicated in perpetuity to maintaining the wetland functions and values to the exclusion of other conflicting uses. The land manager must submit a final long-term management plan to the MBRT. The MBRT must approve the plan before the wetland mitigation bank may be declared successful and final credit release allowed. This plan must include a list of proposed uses for the site. These uses must be compatible with the provisions of the conservation easement and approved by the MBRT. Land use must also be compatible with the wetland mitigation bank's goals and the benefits generated by the site. Uses, such as stormwater control, grazing, all terrain vehicle traffic, etc., which degrade the ecological value of the site, will not be considered compatible. The land manager, consistent with the long-term management plan, shall administer the trust fund specified in section 8.1.

9 CONTINGENCY PLANS AND REMEDIAL ACTIONS

In the event the MBRT determines that the Bank fails to meet the conditions of its Instrument, the lead federal agency shall notify the sponsor and shall specify a reasonable period of time in which to comply. In the event that modifications to the wetland mitigation bank are needed, the sponsor shall develop the necessary contingency plans within 60 days of notification and implement appropriate remedial actions for the Bank with the MBRT's approval. The sale of credits from the wetland mitigation bank shall be prohibited during the period of noncompliance. Continued nonperformance of the wetland mitigation bank shall result in revocation of the Instrument and forfeiture of financial securities to the beneficiary for implementation of the remedial action. Should any modifications to the Instrument be required, recommended changes shall be coordinated by the lead federal agency with the MBRT.

10 ICA MODIFICATION/TERMINATION

This ICA may be modified at any time by the joint agreement of the signatories. This ICA shall expire within five years of the date of the last signatory. A member of the MBRT may terminate its participation in this agreement upon 30 days written notice to all other members.

11 DECISION MAKING AND DISPUTE RESOLUTION

11.1 Dispute Between Members of the MBRT

Between Members of the MBRT: resolution of disputes about application of this banking instrument between the members of the MBRT shall be in accordance with those stated in the Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (60 FR 58605 et. seq.)

- 1) If a particular decision raises concern regarding the application of existing policy or procedures, an agency may request, through written notification, that the issue be reviewed by the Chair.
- 2) The notification will describe the issue in sufficient detail and provide recommendations for resolution.
- 3) Within 20 days, the Chair will consult with the notifying agency(ies) and will resolve the issue.
- 4) The resolution will be forwarded to the other MBRT agencies.
- 5) The Chair will have the responsibility for making final decisions regarding the terms and conditions of the banking instrument where consensus cannot otherwise be reached within a reasonable time frame (90 days from submittal of a complete prospectus)

11.2 Dispute Between the MBRT and the sponsor

Between the MBRT (Acting Through the Chair) and Sponsor: In the event of any disagreement or dispute between the Chair, acting on behalf of the MBRT, and the Sponsor regarding the interpretation and application of the bank's charter, the Chair and the Sponsor shall meet within 30 days of a written request therefor made by a party, and shall attempt to resolve such disagreement or dispute. In the event that the Chair and the Sponsor have not resolved the disagreement or dispute within 60 days of the date of the notice first requesting a meeting, then either party may elect to resolve the dispute or disagreement by the appropriate remedies then available under federal law.

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12 SIGNATURES

	The following parties agree to abide by the terms and	conditions of this Banking Instrument:
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	Chief, Regulatory Branch	
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	Chief, Regulatory Branch	BRILE!
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	Indiana State Office	다. 삼마를 발표하는 사람이 나는 얼마를 받는 사람들이 다 나는 살이 되었다.
	Natural Resources Conservation Service	
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-	Chief, Watersheds and Non-Point	
	Source Programs Branch	
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